ABSTRACT

Various methods and apparatuses are described in which a repair data container may store a concatenated repair signature for multiple memories having one or more redundant components associated with each memory. A processor contains redundancy allocation logic to execute one or more repair algorithms to generate a repair signature for each memory. The repair data container may store actual repair signatures for each memory having one or more defective memory cells detected during fault testing and dummy repair signatures for each memory with no defective memory cells. The processor may contain logic configured to compress an amount of bits making up the concatenated repair signature, to decompress the amount of bits making up the concatenated repair signature, and to compose the concatenated repair signature for all of the memories sharing the repair data container. The repair data container may have an amount of fuses to store the actual repair signatures for an adjustable subset of the multiple memories.